

## عنوان مقاله:

Effect of emulsifier and initiator concentration in semi-batch emulsion copolymerization of butyl acrylate and glycidyl methacrylate

## محل انتشار:

ششمین کنگره بین المللی مهندسی شیمی (سال: 1388)

تعداد صفحات اصل مقاله: 6

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## خلاصه مقاله:

Semi-batch emulsion copolymerization was carried out to prepare poly(butyl acrylate-co-glycidyl methacrylate) latexes at 75 °C, using potassium persulfate as an initiator, sodium dodecylbenzene sulfonate as an emulsifier and sodium bicarbonate as a buffer. The reaction was conducted in three stages; a further stage (called the steady stage, 2 hours) was added to the tradition stages (i.e., feed and seed stages) to improve considerably the monomer conversion. The monomer conversion and particle size distribution were studied by gravimetric and laser light scattering methods, respectively. The effects of variables (i.e., emulsifier and initiator concentration), were fully investigated based on the monomer conversion-time profiles and the particle size. Increasing the initiator or emulsifier contents improved monomer conversion while reduced the particle size.

## کلمات کلیدی:

emulsion copolymerization, glycidyl methacrylate, butyl acrylate, monomer conversion, particle sizedistributio

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